



82



82

**FULL-WAVE MERCURY-VAPOR RECTIFIER**

|                        |        |                     |
|------------------------|--------|---------------------|
| Filament               | Coated |                     |
| Voltage                | 2.5    | a-c volts           |
| Current                | 3.0    | amp.                |
| Maximum Overall Length |        | 4-11/16"            |
| Maximum Seated Height  |        | 4-1/16"             |
| Maximum Diameter       |        | 1-13/16"            |
| Bulb                   |        | ST-14               |
| Base                   |        | Medium 4-Pin        |
| Pin 1-Filament         |        | Pin 3-Plate #1      |
| Pin 2-Plate #2         |        | Pin 4-Filament      |
| Mounting Position      |        | Vertical, base down |



BOTTOM VIEW (4C)

**FULL-WAVE RECTIFIER**

|                                                               |                  |
|---------------------------------------------------------------|------------------|
| Peak Inverse Voltage                                          | 1550 max. volts  |
| Peak Plate Current per Plate                                  | 600 max. ma.     |
| Condenser Mercury Temperature Range                           | 24° - 60°C       |
| <i>With Condenser-Input Filter:</i>                           |                  |
| A-C Plate Voltage per Plate (RMS)                             | 450 max. volts   |
| Total Effective Plate-Supply Impedance per Plate <sup>▲</sup> | 50 min. ohms     |
| D-C Output Current                                            | 115 max. ma.     |
| <i>With Choke-Input Filter:</i>                               |                  |
| A-C Plate Voltage per Plate (RMS)                             | 550 max. volts   |
| Input-Choke Inductance                                        | 6 min. henries   |
| D-C Output Current                                            | 115 max. ma.     |
| Tube Voltage Drop                                             | 15 approx. volts |

**HALF-WAVE RECTIFIER**

As a half-wave rectifier, the 82 is operated with plates connected in parallel. Two 82's so connected in a full-wave circuit can supply twice the output current of a single tube. Both plates within the same tube should be connected to the same terminal of the plate transformer. To equalize the current distribution between plates, a resistor of not less than 100 ohms should be connected in series with each plate.

<sup>▲</sup> When a filter-input condenser larger than 40  $\mu$ f is used, it may be necessary to use more plate-supply impedance than the minimum value shown to limit the peak plate current to the rated value.

← Indicates a change.

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RCA RADIOTRON DIVISION  
RCA MANUFACTURING COMPANY, INC.

DATA